

Critique of Draft 2000 FCRPS Biological Opinion

The Draft 2000 Biological Opinion starts off with good intentions stating the following Scientific Principles (page 25, Volume 1):

Conservation requires a network of diverse, high quality, interconnected habitats and high water quality. **Natural systems functioning properly are necessary to restore salmon and steelhead.**

Technology and research can be used to complement natural functions but cannot replace them.

An abundance of scientific analysis then follows promoting a clear strategy that must be performed which the authors of the final conclusion refuse to accept (page 3, Volume 1):

Much of the regional debate has focused on removal of Snake River dams. There is little doubt dam removal would benefit Snake River salmon and steelhead. The National Marine fisheries Service is not recommending it at this time, however, for several reasons. There is scientific uncertainty about whether breaching dams is necessary to achieve recovery and whether breaching alone can lead to recovery. Only Snake River fish show a benefit from breaching, with no benefit to the other eight listed populations that do not originate in the Snake River Basin. Dam removal is not within the existing authority of the federal agencies, and cannot be implemented in a short time frame. And its high cost could preclude other actions needed throughout the basin. In short, the option of Snake River drawdown ranks as a lower priority than other available options because of narrow benefits, high uncertainties and high costs, and on balance does not appear to be warranted at this time.

The aggressive Plan is designed to provide immediate benefits and lead to salmon and steelhead recovery. This approach leaves breaching on the table as a future option, but challenges hydropower system operators now to meet rigorous survival goals over a discreet period, using continued improvements in flow and spill management and structural improvements at dams.

Meanwhile, the data from the \$20 million report shows that for Idaho salmon and steelhead, the greatest mortality occurs in the Juvenile Migration Corridor (Section 5.2.1.2):

Columbia River basin anadromous salmonid, especially those above Bonneville Dam, have been dramatically affected by the development and operation of the FCRPS. Storage dams have eliminated spawning and rearing habitat and have altered the natural hydrograph of the Snake and Columbia rivers, decreasing spring and summer flows and increasing fall and winter flows. Power operations cause fluctuation in flow levels and river elevations, affecting fish movement through reservoirs and riparian ecology and stranding fish in shallow areas. The eight dams in the migration corridor of the Snake and Columbia rivers alter smolt and adult migrations. Smolts experience a high level of mortality passing through the dams. The dams also have converted the once-swift river into a series of slow-moving reservoirs, slowing the smolts' journey to the ocean and creating habitat for predators. Water velocities throughout the migration corridor are now

far more dependent on volume runoff than before development of the mainstem reservoirs.

Critique of Draft Report Approach

But let us begin this critique by attempting to understand the approach of the Draft Biological Opinion (Chapter 1, page 8):

Given the current low abundance levels, the population growth rate must increase to reach the critical threshold or recovery abundance levels. In the long term, the population growth rate must remain high enough to maintain a stable return rate and keep populations at acceptable abundance levels.... this Biological Opinion considers biological requirements primarily in terms of abundance and productivity.

The 1995 BiOp states:

At the species level, NMFS considers that the biological requirements for survival, with an adequate potential for recovery, are met when there is a high likelihood that the species' population will remain above critical escapement thresholds over a sufficiently long period of time. Additionally, the species must have a moderate to high likelihood that its population will achieve its recovery level within an adequate period of time. The particular thresholds, recovery levels, and time periods must be selected depending upon the characteristics and circumstances of each salmon species under consultation.

The 2000 Draft BiOp quantifies this statement with the following jeopardy standard “metrics” which are exceedingly low goals to obtain:

- 5% chance of absolute extinction in 100 years
- 5% chance of absolute extinction in 100 years
- 50% chance of recovery in 100 years
- 50% chance of recovery in 48 years

At a bare minimum, any legitimate recovery strategy should easily meet these meager requirements. A 50-50 chance of recovery in 48 years does not seem like it would be difficult to obtain and I worry that such low thresholds allow too great a chance of extinction.

Any recommended action should do far better than this yet the recommended “reasonable and prudent” approach does not even reach these low standards. I was stunned to find this admission in the report. It is quite misleading to state that the recommended approach will meet jeopardy standards when the underlying data shows that even these low standards will not be met.

The data is solid on this point, and the final report should come right out and state that removal of lower Snake River Reservoirs will be necessary for recovery of Idaho fish. Delaying this ultimate conclusion is not a legitimate solution and will not be acceptable to the public, to the taxpayers, to the fish or to the Judicial System. Delay has too long been the strategy of those uninterested in salmon recovery.

Recall Judge Malcolm Marsh's 1995 rejection of the National Marine Fisheries Service's previous biological opinion that asserted the Columbia River hydroelectric system operations posed "no jeopardy" to salmon (850 F. Supp 886 D.Or. 1994):

NMFS has clearly made an effort to create a rational, reasoned process for determining how the action agencies are doing in their efforts to save the listed salmon species. But the process is seriously, "significantly," flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed in a deficit situation -- that is, relatively small steps, minor improvements and adjustments -- when the situation literally cries out for a major overhaul. Instead of looking for what can be done to protect the species from jeopardy, NMFS and the action agencies have narrowly focussed their attention on what the establishment is capable of handling with minimal disruption.

The draft 2000 opinion clearly does not address Judge Marsh's criticisms. Five years later, maintenance of the status quo continues to be the officially promoted solution. Five or eight more years of delay does not address the flaw. It would be naïve to believe that this strategy might be acceptable to the Court.

Critique of Draft Report Methodology

Measurements

Much of the Draft 2000 BiOp centers around measurement of data, often time so as to clear up uncertainty as to what causes are contributing to salmon mortality.

Considerable uncertainty exists concerning the levels of differential post-Bonneville Dam mortality of transported and non-transported fish. Evaluations of post-transport and post-bypass delayed mortality is a high priority. The highest priority is determining how much transportation mitigates for the loss of juvenile anadromous salmonids during passage through the hydrosystem.

The Draft does not suggest how this research might be done, so I asked a fish biologist for any ideas as to how this might be performed. All that he could think of would be to outfit the salmon with balloons and antennas similar to last year's test of the new Kaplan turbines. Then sometime after the fish have entered the estuary or ocean a time release mechanism will trigger a chemical reaction that fills a balloon with gas that floats the fish to the surface. Chase boats with antennas will search this now vast area for the fish to collect them before they are eaten. Presumably, studying these fish will indicate if they are suffering from a deadly disease that may have been induced by the transportation or by the hydrosystem system.

Stop for a moment and consider the scale, complexity and expense of such an experiment. How many fish will need to be radio equipped (at \$200 each) so that the experiment will produce enough data to minimize the experimental uncertainty? Also consider that this experiment, which is likely to induce mortality, may need to be performed on listed endangered fish as it is suggested that Idaho fish react differently than downriver stocks.

Remember that the question being asked is "how much transportation mitigates for the loss of juvenile anadromous salmonids during passage through the hydrosystem?" From all the collected PIT-tag data, we already know the answer to be "Not nearly enough." Since 1975 there has not

been a salmon return above the minimum 2% smolt-to-adult ratio necessary to sustain the salmon populations. "Juvenile fish trucking and barging has never produced SARs that are sufficient to maintain or restore ESA-listed Snake River stocks." (Issue 09-002 Volume 2)

This tremendously elaborate "highest priority" experiment might clear up some uncertainty of which option is worse: swimming through reservoirs or being transported by barge. All of the current data confirms that both options are clearly worse than the situation before the rivers were dammed, neither option provides sufficient "mitigation." Either option, traveling in-river through the hazards or the elaborate catch and release strategy leads to extinction of Idaho's salmon and steelhead. What is the value of removing some uncertainty as to which is the worst of these two lethal evils?

Lambda

Perhaps the most disturbing omission from the Draft 2000 BiOp concerns the quantity referred to as "lambda". After reading the entire set of reports, I found no indication of how this quantity will be calculated. The most telling description of lambda is the statement that "We advocate the use of lambda ranging from 1.05 to 1.10 calculated over no less than 20 years as the standard measure of a healthy, recovering salmonid population." Are we seriously considering a 20 year measure to determine the effects of our proposed actions? At the least, the Biological Opinion should clearly state how this quantity is to be calculated.

I further wonder why the more pertinent smolt-to-adult ratio (SAR) is not the measurement of choice. These numbers are calculated annually and provide a truly meaningful recovery goal. Quite simply, if less than 2% of the smolts return as adults then recovery will not be achieved. Hoping for a lambda that suggests a 10% improvement in population is not going to bring recovery to populations like the Sockeye that need population improvements of 1000%. The draft 2000 BiOp recognizes the desperate state of the Sockeye stating "long-term survival and recovery in the wild will require substantial increases in survival through the FCRPS and in other life stages."

SR sockeye take is authorized as long as allowable take of SR spring/summer chinook and SR steelhead is not exceeded.

The Draft 2000 BiOp admits that sockeye "numbers are inadequate for a CRI type analysis" but offers no alternate analysis for monitoring sockeye recovery. Instead it is assumed that if spring chinook and steelhead show population improvements then that will be sufficient to bring about sockeye recovery. The data does not, however, support this assumption. The fish guidance efficiency of juvenile sockeye salmon is likely lower than that of spring chinook salmon, "it is likely that the total direct survival of this (sockeye) species is also less than that of other yearling migrants." Furthermore, the evidence suggests that Sockeye are more sensitive to descaling than Chinook. Mortality that occurred during collection for loading onto barges reached 8.9% at Lower Goose while chinook mortality was four times lower (see table below). Quite simply, Sockeye are not the same as Chinook.

Why not use an analysis that tracks the Snake River Sockeye directly. The smolt-to-adult ratio can be accurately calculated, especially knowing that an estimated 143,000 sockeye smolts outmigrated from the Stanley Basin in 1998. In the year 2000, 237 adult Sockeye returned

yielding a smolt-to-adult ratio of roughly 0.17%. Every year the returns are trapped and counted providing an annual smolt-to-adult ratio. Why must we ignore the sockeye numbers and hope that they will perform as well as the chinook. How is this assumption justifiable?

Collection Mortality (1994-1999)

From the time juveniles enter the fish collection systems until they are loaded on barges, juvenile fish mortality is documented. (page 49, chapter 6)

	Spring/Summer	Fall Chinook	Steelhead	Sockeye
Lower Granite	0.3 to 0.9%	0.4 to 3.6%	0.0 to 0.1%	0.3 to 5.1%
Little Goose	0.6 to 2.1%	0.6 to 2.1%	0.1 to 0.3%	2.3 to 8.9%
Lower Monumental	0.1 to 0.5%	0.4 to 2.1%	0.1 to 0.3%	0.0 to 4.0%
McNary Dam	0.1 to 1.1%	0.5 to 2.1%	not reported	0.1 to 1.9%

Performance Standards for Hydropower

When considering the Performance Standards for Hydropower (page 52 volume 1) one wonders where the option to remove the Lower Snake Reservoirs fits into the methodology.

A system survival standard would be the main measure of juvenile fish survival. System survival may be broken down into minimum survival levels per project, but these would not be considered hard limits. Rather, project-specific actions would be contemplated based on the **relative "priority" of needed improvements in relation to its contribution to system survival, the ESU stocks affected, alternative actions at other projects that may be more effective.** Through this approach, investment choices would be made to ensure the greatest biological benefits for the various ESUs and their individual requirements.

This statement along with the reported data concur that the removal of the Lower Snake Reservoirs should be given highest priority. No other “alternative actions” are more effective in their “contribution to system survival.” Breaching is the investment choice that ensures the greatest biological benefit for all of Idaho’s listed Salmon and Steelhead.

In its report “Return to the River” The Independent Scientific Group (ISG 1996) calls for the reestablishment of “normative” ecosystem features of the Columbia and Snake rivers and tributaries that are essential to salmon restoration. The ISG asserts that only by approaching more normative ecosystem conditions would recovery goals for salmonids be attained.

For Fall Chinook “none of the recommended habitat measures, nor any changes in operation of the FCRPS short of breaching, will result in significant increase in the basic productivity of Snake River fall chinook.” (page 45, Volume 2)

Prepare to Breach

The Action to “develop and submit for independent review an economic and cultural mitigation plan” must receive immediate attention so that we will effectively and completely compensate for the eventual removal of the Lower Snake Reservoirs. All of the benefits that these four reservoirs provide can still be provided without the reservoirs actually in place.

No adverse economic effect need be felt by anyone with the lone exception of the federal government that will lose about \$250 million annual revenue from hydropower sales. Perhaps investing in a renewable energy source like photovoltaic energy would be appropriate. The four Lower Snake Reservoirs have paid for their original investment and the time has come to mothball their impounding structures. It is also worth noting that the Draft 2000 Report points out “several new gas-fired combustion turbines south of John Day cutplane (with a total capacity of about 1250 MW of base load generation) are being licensed and could be operational by summer 2002.” If the nation believes that the government should maintain its presence in the energy business then the report might look for an energy investment that conforms with the laws of this country.

Shippers, irrigators and ratepayers do not need to feel any adverse economic effect.

Tax dollars can be saved (\$4 million annually) by subsidizing the rail system instead of the barge system to ensure that shipping cost do not increase (see www.bluefish.org/clarkstn.htm). An investment in Washington State’s successful Grain Train might also be appropriate.

An affordable 30-mile pipeline can be laid to ensure that 13 agribusiness continue to receive 680 cfs of irrigation water for 36,000 acres of farm land (see www.bluefish.org/pasco.htm). It is not necessary to impound 7% of the Columbia Basin behind the four Lower Snake Dams in order to provide this irrigation that is pumped up from the Little Goose reservoir.

As the WPPSS debt is soon to be paid down, BPA ratepayers should expect to see a decrease in their rates, not an increase as government and media reports have indicated. The current WPPSS debt load is roughly \$500 million annually while the four Lower Snake Dams produce total annual sales of roughly \$250 million (see www.bluefish.org/idfall.htm). Informing the public of this fact will go along way towards appeasing many of those that oppose the removal of these four reservoirs.

The greatest attention should be directed towards those that sacrifice their reservoir dependent jobs in order that the salmon might return. Several hundred citizens will need new jobs, retraining, relocating or retirement compensation. Every effort must be taken to ensure that these people receive the greatest attention to their needs. No adverse economic effect need be felt by anyone.

From travelling through the region during federal caucus testimony, it became readily apparent that there is a great need to expand multi-cultural awareness. Some organizations already exist that address this disturbing problem but could use additional funding, (i.e. Breaking Bread in Lewiston, Idaho).

The preparation of this economic report should begin immediately with funding from the BPA fish recovery funds. No appropriation from Congress is necessary, as the BPA has never received appropriations from Congress in the past. Quite possibly it would be appropriate for the report to be approved by the people of the affected area. There has been much concern that a representational vote from Congress would be inappropriate and that a direct democratic vote would be more acceptable. Quite simply, if the people of the area do not agree to the proposed “mitigation” then the plan should be modified until it is acceptable. This work should begin immediately and should be available for their first public review in no more than a year’s time.

Preliminary engineering and design work should also begin immediately and be available for first review in no more than two years. As stated in the Draft 2000 BiOp, "These actions will reduce the time needed for possible implementation, thereby avoiding the risks of delay."

Implementation

From page 2 volume 1 Draft Basin-wide Salmon Recovery Strategy:

The Federal Caucus Plan places priority on actions with the **best chance of being implemented**, the best chance of providing solid and predictable biological benefits, and the best chance of benefiting the broadest range of fish species. It calls for a contribution from governments and individuals at all levels, yet it also recognizes and complements the strong efforts already underway throughout the region.

It is important to recognize resources are limited. Congress and the region are most likely to commit resources to actions with immediate, predictable and broad benefits.

From 1.3 Rationale, page 28 volume 1, Draft Basin-wide Salmon Recovery Strategy:

The Plan is built on biological objectives, seeks to establish priorities based upon sound scientific principles, while recognizing that there is a limit to the resources available for the job and to the **authority of federal agencies**. The important questions to ask of the recovery plan are: does this plan as a whole have a reasonable chance of being implemented, and if so, can it reasonably be expected to result in the conservation and survival of the listed stocks in the basin as a whole? NMFS concludes that the answer to both questions is yes. This conclusion is based on the biological requirements of the species, the substantive elements of the Plan itself, and the best science available for evaluating the effects of this Plan.

Let us take a closer look at these statements one at a time.

Priority on actions with the best chance of being implemented

It appears here that the authors of this decision were feeling pressure from Congress to not recommend breaching the Lower Snake River dams. Otherwise, how would the authors know that the breach recommendation would have difficulty in being implemented. Why would they thereby assume that it would be easier to challenge Idaho state law and seek more water for augmentation from Idaho irrigators. The question posed is which would be easier to implement.

Priority on actions with the best chance of providing solid and predictable biological benefits

Chairman of the Council on Environmental Quality openly admits that breaching four dams on the Lower Snake River "is the single most beneficial thing we could do" for the salmon runs (Seattle Post-Intelligencer, 7/28/99). The Draft 2000 BiOp (page 45, volume 2) admits that "none of the recommended habitat measures, nor any changes in operation of the FCRPS short of breaching, will result in significant increase in the basic productivity of Snake River fall chinook. It would be easy to go on here with more quotes, charts and tables. The science is in and the data is incontrovertible. Quite clearly, removing the Lower Snake Reservoirs has the best chance of providing solid and predictable biological benefits for Idaho's salmon and steelhead.

Priority on actions with the best chance of benefiting the broadest range of fish species

Removal of the Lower Snake Reservoirs benefits an immense ecosystem in Idaho. Idaho's salmon and steelhead bring from the ocean considerable nutritional elements to the granite soils of Idaho's inland forest. As well, the returning adults provide food for bears and other mammals, insects and soil organisms, the salmon eggs provide food for other fish and aquatic species.

A new report released by Washington Department of Fish and Wildlife has found that salmon play a vital role in watershed health, transporting nutrients from the ocean back to the watershed. More than 137 species of fish and wildlife - from orcas to caddisflies - depend on the Northwest salmon for their survival, a revelation that makes salmon recovery efforts of far greater importance than the protection of a single species. (Environmental News Service, Ed Hunt, 7/6/00)

It is repugnant to suggest that one of the greatest shortcomings of the breach alternative is that it does not benefit Oregon and Washington fish.

It is important to recognize resources are limited. Congress and the region are most likely to commit resources to actions with immediate, predictable and broad benefits

It is interesting to note that one of the arguments against the removal of the Lower Snake Reservoirs is the expense of \$800 million. Instead, the Draft 2000 BiOp recommends an estimated billion dollars on other measures that will fall short of Idaho salmon recovery. Then five or eight years from now, dam removal will be recommended for the now inflated \$800 million. The science within the report is conclusive that the removal of the Lower Snake Reservoirs will have immediate, predictable and broad benefits.

(1.3 Rationale, page 28 volume 1, Draft Basin-wide Salmon Recovery Strategy)

The Plan recognizes that there is a limit to the authority of federal agencies

Here the action agencies are indicating an unwillingness to oppose the powers that wish to maintain the status quo. This is a continuation of what the judicial system originally criticized:

...The process is seriously, "significantly," flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed in a deficit situation -- that is, relatively small steps, minor improvements and adjustments -- when the situation literally cries out for a major overhaul. Instead of looking for what can be done to protect the species from jeopardy, NMFS and the action agencies have narrowly focussed their attention on what the establishment is capable of handling with minimal disruption.

Protection of "the establishment" is not what we are seeking. Enforcement of the law is.

In reading the Endangered Species Act, it is evident that the judicial system is in charge now and the authority of the decision does not rest in Congress where protection of "the establishment" and the "status quo" is apparently being supported. It is important to recognize that hydropower sales from 29 federal dams marketed by the Bonneville Power Administration (BPA) is the second greatest producer of revenue for the United States government. Congress may be compared to a corporation that is interested in protecting revenues, the four Lower Snake Dams providing 10% of the BPA revenue. Allowing Congress the authority to make this decision is comparable to asking the Board of Idaho Power to decide if the Hells Canyon complex should be removed. A clear conflict of interest is at hand and the authors of the Endangered Species Act

have fortunately placed the decision in the hands of the judicial system instead. The suggestion by the Action Agencies to put this decision into the hands of Congress is a further attempt to create delay and maintain the status quo.

Does this plan as a whole have a reasonable chance of being implemented

It is very unlikely that there will be successful implementation of the Action proposed in 9.6.1.2.4 BOR Non-FCRPS Project Operations to Support Mainstem Flow Objectives:

The BOR shall continue to annually provide 427 kaf from the upper Snake River, pursuant to state law, during the juvenile salmon outmigration period (April through August).

To provide this water, BOR has reacquired some 60,000 acre-feet of reservoir storage space in its upper Snake River basin reservoirs and has assigned about 100,000 acre-feet of previously unassigned space to flow augmentation. BOR has also leased 38,000 acre-feet of storage space in Palisades Reservoir as part of a 5-year agreement with the Shoshone Bannock Tribes of the Fort Hall Indian Reservation and has acquired 17,650 acre-feet of natural flow rights in Oregon for flow augmentation. BOR proposes to acquire any remaining water needed to meet the 427-kaf goal from willing lessors in Idaho's water banks. Using this strategy, BOR has successfully provided about 427 kaf annually from upper Snake River basin reservoirs and natural flow rights since 1993.

While the BOR has been able to meet its commitment to provide this amount since 1993 (actually the flow objective was met only 20 days in the summer of 2000), hydrologic conditions and legal and institutional impediments limit the surety that this amount could be provided in all years. BOR has committed to using available powerhead space in several of its reservoirs in the event that it would be unable to provide 427 kaf without this extraordinary measure. Even with these measures, BOR estimates that during extended droughts it would be unable to deliver 427 kaf for salmon flow augmentation and BOR's access to Idaho's water banks expires at the end of 2000.

The Draft 2000 BiOp speaks for itself here. It has been difficult to maintain the current 427 kaf of flow augmentation and it recognizes the "legal and institutional impediments" that resist any increase. The Idaho Water Users Association, Governor Kempthorne, Idaho Congressmen Simpson and Chenoweth, have all made it clear that they will oppose attempts by the federal government to take more water from Idaho for flow augmentation.

The BOR shall seek through ongoing negotiations with stakeholders in Idaho to determine additional state law mechanisms to increase supplies of water available for flow augmentation from willing sellers and lessors.

Through ongoing negotiations with stakeholders in Idaho, the BOR is seeking to increase supplies of water available for flow augmentation by acquiring greater access to Idaho's water banks. The exact amounts that could be available from this source for flow augmentation vary annually with water supply, and the level of access that might be acquired through these negotiations is currently unknown.

In Section 9.6.1.1.3 Improving Juvenile Reservoir Survival, the Plan proposes an "increased flow augmentation for summer migrants, particularly in the low water years." This is of course the same time that Idaho farmers will most vigorously fight for their water that is protected by Idaho

state law. As the report also points out in Issue 10-005 (Economic loss associated with flow augmentation) “An additional 1 million acre-feet for flow augmentation results in an average **loss of about \$430 million annually to the economy of southern Idaho**, according to a recent study by the Bureau of Reclamation.”

The 427,000 acre-feet currently used increases the velocity through the Lower Snake by only about 3%. The Idaho Water Association has challenged that the correlated benefit of flow augmentation likely is more due to temperature than to water velocity. The water temperature from the Snake River is often quite warm after passing through the many reservoirs of the Idaho desert and any benefit proposed from this additional warm water is suspect.

If so, can it reasonably be expected to result in the conservation and survival of the listed stocks in the basin as a whole?

This is the most important point. If the plan were miraculously implemented in entirety, does the best science available suggest that this would bring about survival and recovery of the listed species? The data and conclusions in the report states an emphatic NO. Minam and Imnaha Chinook will require an additional 45% improvement, Marsh Creek an additional 14%, Sulphur an additional 9%. Fall Chinook will require an additional 19% improvement and Steelhead an additional 35%.

NMFS concludes that the answer to both questions is yes. This conclusion is based on the biological requirements of the species, the substantive elements of the Plan itself, and the best science available for evaluating the effects of this Plan.

Who ever wrote this statement must not have read the rest of the report that clearly shows that the plan is destined to fail. As such, the Plan is little more than an attempt to delay the removal of the Lower Snake Reservoirs. The report clearly states that choosing to remove the Lower Snake Reservoirs will recover both Spring/Summer and Fall Chinook and require only an additional 8% improvement for Snake River Steelhead. As stated immediately above, the Draft 2000 BiOp plan of doing everything else possible will not do enough to save Idaho Salmon and Steelhead.

Promoting the current or similar plan is an action of creating further unnecessary delay. Any attempt by any member of a government agency or legislative body to accept this plan will be considered as a “taking” of numerous listed endangered species and will be pursued to the full extent of the law. Please take this warning seriously as I find it to be my duty as a citizen of the United States to insure that immediate action be taken for recovery of Idaho Salmon and Steelhead. (refer to Endangered Species Act, Section 11(g) Citizen Suits)

Thank you for the opportunity to comment on the Draft 2000 Biological Opinion and I hope that you accept these words with the sincerity in which they were intended.

Sincerely,

Scott Levy
redfish@bluefish.org